

CHAPTER 7

Library Resources and Technology

This chapter contains statistics on libraries and on the use of information technologies. These data show the extent of America's access to information technologies outside of formal classroom activities. The data also provide a capsule description of the magnitude and availability of library resources. Access to information has been widely cited as the key to success in a growing number of endeavors. Thus, how information is made available and to whom are matters of concern.

The first section of the chapter (tables 421 to 423 and 426 to 429) deals with public libraries, public and private school libraries, and college and university libraries. It contains data on collections, population served, staff, and expenditures. Two tables provide institutional-level information for the largest public libraries and the largest college libraries in the country.

The second half of the chapter (tables 425, 426, and 430 to 434) provides information on the availability and use of technology. For example, the proportion of children using computers at school is shown over time. Also included are data on the use of home computers by adults and school children, with comparisons among various demographic groups.

Related data may be found in various sections of this report. For example, statistics on the number of degrees conferred in computer and information sciences and library sciences are in chapter 3. Further information on survey methodologies is in the "Guide to Sources" in the Appendix and in the publications cited in the source notes.

Resources

In 1993–94, there were 83 school library visits each week per 100 public school students. Elementary school students were more likely to visit their school libraries (89 visits per 100 students each week) than secondary school students (69 per 100). Private school students were slightly less likely to visit their libraries (77 per 100). The average number of library staff per school was 1.8 at public schools, and 1.2 at private schools. Public school libraries generally had smaller numbers of books on a per student basis than private school libraries. In 1993–94, public school libraries held an average of 2,585 books per 100 students compared to an average of

3,716 per 100 students at private schools. Although public elementary school libraries had slightly smaller holdings than public secondary schools on a per student basis, the elementary school students checked out twice as many books on a per student basis (1.5 per week compared to .7 per week) (table 421).

The increase in college library resources kept pace with increases in enrollment between 1984–85 and 1994–95. The library staff to student ratio decreased slightly from 153 students per staff member to 150 students per staff member. The library operating expenditure per student average rose 9 percent in constant dollars from 1984–85 to \$417 in 1994–95. However, other college expenditures rose faster than library expenditures and the proportion of college education budgets spent on libraries fell from 3.4 percent in 1984–85 to 2.9 percent in 1994–95 (table 426).

In 1996, there were 8,946 public libraries in the United States with 711 million books and serial volumes. The annual attendance per capita was 4.0 and the reference transactions per capita was 1.1 (table 428).

Technology

There has been widespread introduction of computers into the schools in recent years. In 1997, the average public school contained 75 computers. One important technological advance that has come to schools following the introduction of computers has been connections to the Internet. The proportion of schools with Internet access has increased rapidly from 35 percent in 1994 to 89 percent in 1998. About 51 percent of instructional rooms had access to the Internet in 1998 (table 425).

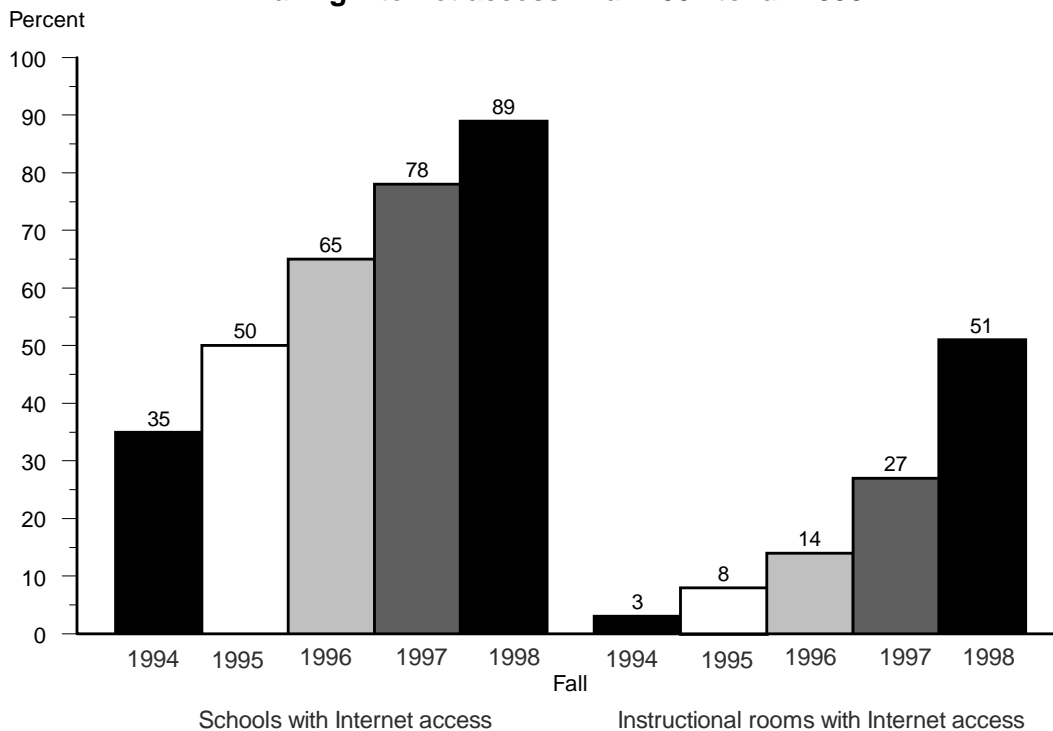
The total computer usage rate of students at school increased from 59 percent in 1993 to 69 percent in 1997. The rate for grades 1 to 8 increased from 69 percent in 1993 to 79 percent in 1997. The school computer usage rate in 1997 was 70 percent for students in high school and 65 percent for undergraduate students in college. At that time, sizable percentages of students used computers at home, though fewer actually used them for schoolwork. About 43 percent of elementary school children used computers at home and about 24 percent used them for schoolwork. Students at the high school and undergraduate levels were more likely than elementary

school children to use home computers for schoolwork. In general, students in higher income families were much more likely to use computers at home and use them for schoolwork than students from lower income families. About 13 percent of the high school students in the \$15,000 to \$19,999 household income group used computers at home for schoolwork compared to 66 percent in the \$75,000 and over income group (table 434).

The use of computers has become widespread in the workplace. In 1997, 50 percent of all workers used computers on the job. More frequent use of computers was associated with higher levels of education and higher incomes. Thirty-six percent of high school graduates and 12 percent of high school

dropouts used computers at work compared to 79 percent of those with master's degrees. Among those who did use computers, the master's degree recipients were the most likely to use the computers for a wide variety of applications. Among the most common applications for all employees using computers on the job were: bookkeeping/invoicing (66 percent), word processing (57 percent), communications (47 percent), analysis/spreadsheets (41 percent), and calendar/schedule (38 percent). Workers in the 25- to 59-year-old age range were more likely to use computers than younger or older workers. Elementary and secondary teachers were less likely to use computers than persons employed in other managerial or professional fields (table 430).

Figure 33.- Percent of all public schools and instructional rooms having Internet access: Fall 1994 to fall 1998



SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, *Advanced Telecommunications in U.S. Elementary and Secondary Public Schools*, Fall 1996, and *Internet Access in Public Schools and Classrooms: 1994-98*.

Table 421.—Percentage of school library/media centers that offered selected services and equipment, and library/media center expenditures, by control and level of school: 1993–94

Selected statistics	Public				Private			
	Total	Elementary	Secondary	Combined	Total	Elementary	Secondary	Combined
1	2	3	4	5	6	7	8	9
Number of schools with libraries	72,286 —	53,059 —	17,356 —	1,871 —	19,301 —	10,880 —	4,178 —	4,243 —
Average number of staff per library								
Total	1.81 (0.02)	1.69 (0.03)	2.12 (0.03)	1.71 (0.07)	1.23 (0.03)	1.09 (0.03)	1.58 (0.06)	1.25 (0.07)
Certified library/media specialists	0.86 (0.01)	0.79 (0.02)	1.03 (0.02)	0.79 (0.05)	0.28 (0.01)	0.20 (0.02)	0.47 (0.03)	0.30 (0.02)
Full-time	0.61 (0.01)	0.51 (0.01)	0.84 (0.02)	0.51 (0.03)	0.17 (0.01)	0.07 (0.01)	0.35 (0.03)	0.21 (0.02)
Part-time	0.25 (0.01)	0.28 (0.02)	0.19 (0.01)	0.28 (0.04)	0.11 (0.01)	0.12 (0.02)	0.11 (0.01)	0.09 (0.02)
Other professional staff	0.27 (0.01)	0.27 (0.01)	0.26 (0.02)	0.29 (0.03)	0.66 (0.02)	0.65 (0.02)	0.65 (0.04)	0.70 (0.06)
Full-time	0.13 (0.01)	0.13 (0.01)	0.14 (0.01)	0.13 (0.03)	0.23 (0.02)	0.19 (0.01)	0.26 (0.03)	0.32 (0.04)
Part-time	0.13 (0.01)	0.14 (0.01)	0.13 (0.01)	0.16 (0.02)	0.43 (0.01)	0.47 (0.02)	0.39 (0.03)	0.39 (0.04)
Other paid employees	0.68 (0.02)	0.63 (0.02)	0.83 (0.02)	0.62 (0.04)	0.29 (0.02)	0.24 (0.02)	0.46 (0.03)	0.25 (0.03)
Full-time	0.34 (0.01)	0.28 (0.01)	0.49 (0.02)	0.29 (0.03)	0.07 (0.01)	0.05 (0.01)	0.12 (0.02)	0.07 (0.01)
Part-time	0.34 (0.01)	0.34 (0.02)	0.34 (0.02)	0.33 (0.03)	0.22 (0.01)	0.19 (0.02)	0.34 (0.02)	0.18 (0.03)
Percentage of schools' library media centers with the following equipment								
Telephone	61.2 (1.3)	55.8 (1.8)	74.7 (1.6)	51.6 (3.3)	40.8 (1.3)	30.7 (1.6)	52.8 (2.5)	54.6 (4.2)
Fax machine	7.8 (0.5)	4.7 (0.6)	15.1 (0.8)	8.8 (1.4)	5.1 (0.5)	3.1 (0.6)	7.9 (1.1)	7.4 (1.2)
Computer with modem	34.3 (1.0)	28.3 (1.2)	48.2 (1.5)	38.1 (3.0)	19.5 (1.0)	12.2 (1.5)	30.2 (1.9)	27.9 (2.7)
Automated catalog	24.0 (0.9)	20.3 (1.1)	32.8 (1.1)	20.5 (1.9)	9.7 (0.7)	5.5 (0.5)	15.8 (1.9)	14.4 (2.3)
Automated circulation system	37.9 (1.1)	34.1 (1.6)	47.7 (1.3)	27.8 (2.6)	9.5 (0.7)	5.4 (0.6)	16.0 (1.8)	13.8 (1.8)
Database searching with CD-ROM	31.2 (0.8)	23.9 (1.2)	48.1 (1.3)	31.4 (3.1)	13.9 (0.8)	6.3 (0.8)	25.7 (1.6)	21.6 (2.2)
On-line database searching	9.4 (0.5)	5.4 (0.5)	18.9 (0.9)	8.8 (1.5)	5.5 (0.5)	0.7 (0.3)	12.2 (1.2)	11.0 (1.7)
Compact disc for periodical indices, etc.	46.7 (1.1)	39.6 (1.5)	63.5 (1.3)	46.6 (3.7)	19.6 (1.0)	12.3 (1.1)	33.5 (2.2)	24.6 (2.2)
Video laser disc	31.9 (1.0)	30.3 (1.3)	36.1 (1.3)	26.1 (2.8)	6.3 (0.6)	4.8 (0.7)	9.9 (1.2)	6.9 (1.1)
Connection to Internet	12.0 (0.6)	9.5 (0.8)	17.5 (0.8)	15.0 (1.9)	5.3 (0.5)	2.8 (0.8)	9.2 (1.1)	7.5 (1.2)
Cable television	76.2 (0.8)	75.0 (1.1)	80.6 (0.9)	57.7 (3.6)	39.9 (1.3)	42.6 (2.0)	43.1 (2.8)	30.1 (2.7)
Broadcast television	48.6 (1.0)	48.0 (1.4)	49.9 (1.3)	48.1 (3.1)	39.9 (1.6)	42.9 (1.9)	39.7 (2.5)	32.2 (3.9)
Closed circuit television	25.5 (0.7)	22.0 (1.0)	34.0 (1.0)	20.9 (2.2)	8.8 (0.7)	5.7 (1.0)	19.2 (1.6)	6.3 (1.5)
Satellite dish	22.9 (0.6)	14.4 (0.7)	41.1 (1.1)	45.2 (3.0)	8.7 (0.9)	5.6 (0.9)	15.6 (1.2)	9.8 (2.5)
Total students using library per 100 students each week ¹	83.4 (0.4)	88.9 (0.5)	68.6 (0.9)	66.4 (1.8)	76.5 (0.9)	84.9 (1.0)	64.6 (1.7)	60.0 (2.6)
Books checked out per 100 students each week ¹	128 (2)	150 (3)	67 (4)	85 (8)	116 (18)	146 (28)	47 (8)	68 (5)
Percentage of schools offering—								
Microcomputers	90.1 (0.7)	88.5 (1.0)	94.0 (1.0)	87.4 (1.5)	75.8 (1.6)	72.8 (2.1)	80.6 (2.9)	78.5 (3.5)
Long distance learning	19.0 (0.8)	15.9 (1.1)	24.8 (1.0)	36.4 (2.6)	8.8 (0.9)	8.3 (0.9)	8.2 (1.6)	10.9 (2.9)
Average holdings per 100 students at the end of the 1992–93 school year								
Books (number of volumes)	2,585 (57)	2,467 (81)	2,891 (101)	3,085 (262)	3,716 (252)	3,455 (349)	5,383 (726)	3,677 (286)
Current serial subscriptions (print/microfilm)	9 (2)	7 (2)	14 (1)	15 (3)	8 (1)	7 (1)	16 (1)	8 (1)
Video materials (tape and disc)	38 (2)	35 (2)	46 (2)	70 (11)	47 (5)	44 (5)	50 (6)	54 (10)
Other audiovisual materials	116 (4)	114 (6)	117 (7)	187 (24)	76 (6)	74 (5)	120 (16)	63 (16)
Microcomputer software	18 (1)	20 (1)	12 (1)	21 (2)	26 (4)	28 (5)	11 (4)	26 (9)
CD-ROM titles	1 (2)	1 (2)	2 (2)	3 (2)	1 (2)	— (2)	2 (1)	2 (1)
Locally budgeted expenditures ³ per student, 1992–93								
Books	\$8.52 (0.23)	\$7.80 (0.25)	\$10.06 (0.42)	\$14.40 (2.06)	\$7.86 (0.45)	\$6.94 (0.52)	\$12.86 (1.26)	\$8.09 (0.97)
Current serial subscriptions (print/microfilm)	2.18 (0.05)	1.49 (0.06)	4.15 (0.14)	3.33 (0.30)	1.57 (0.09)	0.95 (0.10)	4.83 (0.36)	1.78 (0.20)
Video materials (tape and disc)	1.24 (0.04)	1.04 (0.05)	1.77 (0.10)	1.74 (0.35)	1.07 (0.09)	0.87 (0.08)	1.49 (0.15)	1.40 (0.27)
Other audiovisual materials	0.82 (0.04)	0.77 (0.06)	0.87 (0.07)	1.54 (0.30)	0.55 (0.05)	0.55 (0.06)	0.72 (0.10)	0.45 (0.11)
Microcomputer software	1.09 (0.09)	0.89 (0.07)	1.50 (0.35)	2.84 (0.90)	1.41 (0.19)	1.25 (0.20)	1.86 (0.59)	1.63 (0.36)
CD-ROM titles	0.63 (0.05)	0.38 (0.06)	1.24 (0.09)	2.09 (0.53)	0.69 (0.17)	0.59 (0.25)	1.69 (0.18)	0.53 (0.11)
Expenditures (all sources) per student, 1992–93								
Total, library/media materials	17.18 (0.35)	14.86 (0.45)	22.71 (0.82)	31.11 (3.02)	15.96 (0.80)	13.68 (0.92)	27.29 (2.29)	16.99 (1.53)
Microcomputer hardware	3.84 (0.25)	3.43 (0.33)	4.73 (0.46)	7.15 (1.42)	3.60 (0.59)	2.62 (0.55)	8.68 (1.87)	3.98 (1.27)
Audiovisual equipment	2.24 (0.15)	2.00 (0.17)	2.98 (0.46)	2.25 (0.30)	1.57 (0.19)	1.39 (0.25)	3.12 (0.60)	1.37 (0.32)
On-line database searching/electronic communications	0.30 (0.04)	0.25 (0.06)	0.43 (0.05)	0.55 (0.26)	0.31 (0.13)	0.29 (0.19)	0.60 (0.16)	0.24 (0.06)

¹ During the most recent full week of school.² Standard error less than .5.³ Locally budgeted expenditures exclude federal gifts and grants.

—Data not available.

NOTE.—Percentages are based on schools that have library/media centers. In school year 1990–91, 96 percent of public schools had library/media centers. Standard errors appear in parentheses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Schools and Staffing Survey, 1993–94*, unpublished data. (This table was prepared August 1997.)

Table 422.—Selected statistics on public school library/media centers, by level and enrollment size of school: 1993–94

Selected statistics	Public elementary, secondary, and combined	Elementary libraries, by enrollment size of school					Secondary libraries, by enrollment size of school				
		Total	Less than 150	150 to 499	500 to 749	750 or more	Total	Less than 150	150 to 499	500 to 749	750 or more
1	2	3	4	5	6	7	8	9	10	11	12
Number of schools with libraries	72,286 —	53,059 —	4,068 —	27,288 —	15,587 —	6,116 —	17,536 —	1,991 —	5,431 —	3,610 —	6,503 —
Average number of staff per library											
Total	1.81 (0.02)	1.69 (0.03)	1.39 (0.09)	1.61 (0.04)	1.76 (0.05)	2.03 (0.07)	2.12 (0.03)	1.66 (0.09)	1.73 (0.04)	1.80 (0.05)	2.90 (0.04)
Certified library/media specialists	0.86 (0.01)	0.79 (0.02)	0.65 (0.07)	0.75 (0.03)	0.85 (0.04)	0.90 (0.04)	1.03 (0.02)	0.80 (0.06)	0.93 (0.03)	0.98 (0.03)	1.36 (0.03)
Full-time	0.61 (0.01)	0.51 (0.01)	0.13 (0.04)	0.42 (0.02)	0.66 (0.02)	0.82 (0.04)	0.84 (0.02)	0.28 (0.04)	0.68 (0.02)	0.92 (0.02)	1.27 (0.02)
Part-time	0.25 (0.01)	0.28 (0.02)	0.52 (0.06)	0.33 (0.02)	0.19 (0.03)	0.08 (0.02)	0.19 (0.01)	0.52 (0.05)	0.24 (0.02)	0.06 (0.01)	0.09 (0.01)
Other professional staff	0.27 (0.01)	0.27 (0.01)	0.30 (0.05)	0.27 (0.02)	0.25 (0.02)	0.31 (0.04)	0.26 (0.02)	0.33 (0.05)	0.23 (0.03)	0.17 (0.02)	0.25 (0.02)
Full-time	0.13 (0.01)	0.13 (0.01)	0.09 (0.02)	0.13 (0.01)	0.12 (0.02)	0.22 (0.03)	0.14 (0.01)	0.13 (0.04)	0.11 (0.02)	0.08 (0.02)	0.17 (0.02)
Part-time	0.13 (0.01)	0.14 (0.01)	0.21 (0.04)	0.14 (0.02)	0.13 (0.02)	0.09 (0.03)	0.13 (0.01)	0.19 (0.03)	0.11 (0.02)	0.09 (0.02)	0.08 (0.01)
Other paid employees	0.68 (0.02)	0.63 (0.02)	0.44 (0.06)	0.59 (0.03)	0.66 (0.04)	0.82 (0.06)	0.83 (0.02)	0.54 (0.06)	0.57 (0.04)	0.66 (0.05)	1.29 (0.04)
Full-time	0.34 (0.01)	0.28 (0.01)	0.10 (0.03)	0.22 (0.02)	0.34 (0.03)	0.51 (0.04)	0.49 (0.02)	0.28 (0.04)	0.27 (0.03)	0.39 (0.03)	0.86 (0.03)
Part-time	0.34 (0.01)	0.34 (0.02)	0.34 (0.05)	0.37 (0.03)	0.32 (0.03)	0.31 (0.04)	0.34 (0.02)	0.26 (0.04)	0.31 (0.02)	0.27 (0.04)	0.43 (0.02)
Percentage of schools' library media centers with the following equipment											
Telephone	61.2 (1.3)	55.8 (1.8)	40.1 (5.0)	49.4 (2.3)	64.0 (2.8)	73.8 (4.0)	74.7 (1.6)	42.7 (4.9)	68.0 (2.6)	85.5 (1.9)	92.9 (1.0)
Fax machine	7.8 (0.5)	4.7 (0.6)	8.2 (2.6)	3.4 (0.7)	5.7 (1.3)	5.1 (1.4)	15.1 (0.8)	11.5 (2.3)	16.4 (1.5)	18.7 (2.3)	18.5 (1.3)
Computer with modem	34.3 (1.0)	28.3 (1.2)	21.9 (4.5)	24.9 (1.7)	33.4 (2.8)	34.6 (3.1)	48.2 (1.5)	46.4 (4.1)	47.3 (2.6)	51.3 (2.9)	59.0 (2.0)
Automated catalog system	24.0 (0.9)	20.3 (1.1)	14.2 (3.8)	17.5 (1.4)	24.9 (2.1)	25.4 (2.2)	32.8 (1.1)	21.6 (3.5)	25.9 (2.1)	32.2 (2.7)	43.6 (1.7)
Database searching with CD-ROM	37.9 (1.1)	34.1 (1.6)	16.0 (3.8)	28.5 (1.9)	40.4 (2.7)	55.0 (3.3)	47.7 (1.3)	22.4 (3.9)	41.6 (2.5)	48.0 (3.1)	64.7 (1.8)
On-line database searching	31.2 (0.8)	23.9 (1.2)	23.3 (3.3)	21.9 (1.7)	25.3 (2.6)	30.1 (2.8)	48.1 (1.3)	35.5 (4.1)	48.6 (2.3)	53.1 (3.1)	63.0 (2.1)
Compact disc for periodical indices, etc.	9.4 (0.5)	5.4 (0.5)	6.0 (1.3)	4.1 (0.7)	7.1 (1.3)	6.8 (1.3)	18.9 (0.9)	14.6 (2.2)	19.9 (2.0)	20.5 (2.6)	26.3 (1.4)
Video laser disc	46.7 (1.1)	39.6 (1.5)	27.0 (3.5)	37.5 (2.1)	42.6 (2.7)	49.5 (3.4)	63.5 (1.3)	50.4 (3.9)	62.4 (2.3)	69.8 (2.7)	76.9 (1.5)
Connection to Internet	31.9 (1.0)	30.3 (1.3)	19.6 (4.8)	24.8 (1.7)	37.2 (2.3)	44.3 (3.1)	36.1 (1.3)	20.0 (4.3)	27.5 (2.1)	41.1 (2.1)	43.5 (1.7)
Cable television	12.0 (0.6)	9.5 (0.8)	5.0 (1.3)	8.7 (1.4)	11.9 (1.8)	10.0 (1.5)	17.5 (0.8)	12.3 (2.8)	18.5 (1.7)	18.9 (2.5)	23.8 (1.6)
Broadcast television	76.2 (0.8)	75.0 (1.1)	59.8 (4.9)	78.0 (1.6)	74.7 (2.3)	73.0 (3.0)	80.6 (0.9)	65.5 (4.5)	80.3 (1.9)	81.9 (2.5)	83.9 (1.1)
Closed circuit television ..	48.6 (1.0)	48.0 (1.4)	47.0 (4.8)	45.2 (1.6)	51.5 (2.5)	52.3 (4.1)	49.9 (1.3)	36.4 (4.3)	46.0 (2.7)	52.0 (3.1)	59.4 (1.5)
Satellite dish	25.5 (0.7)	22.0 (1.0)	7.0 (2.1)	19.2 (1.4)	23.1 (2.0)	41.4 (2.9)	34.0 (1.0)	14.3 (3.4)	26.8 (2.0)	46.1 (3.1)	44.5 (1.5)
Total students using library per 100 students each week ¹	22.9 (0.6)	14.4 (0.7)	15.4 (2.8)	13.6 (1.2)	12.7 (1.4)	21.3 (3.1)	41.1 (1.1)	48.1 (4.9)	53.3 (2.2)	54.5 (2.7)	42.4 (1.8)
Books checked out per 100 students each week ¹	83.4 (0.4)	88.9 (0.5)	93.6 (1.0)	91.7 (0.7)	88.0 (1.0)	75.1 (2.0)	68.6 (0.9)	87.9 (2.5)	74.2 (1.4)	67.0 (1.8)	58.9 (1.1)
Percentage of schools offering—											
Microcomputers	128 (2)	150 (3)	222 (11.5)	161 (5.2)	134 (4.6)	93 (4.7)	67 (4.0)	227 (21.3)	66 (4.2)	46 (3.6)	31 (1.1)
Long distance learning	90.1 (0.7)	88.5 (1.0)	79.2 (3.4)	89.1 (1.6)	88.4 (2.0)	92.1 (2.2)	94.0 (1.0)	88.4 (2.7)	96.4 (1.1)	96.4 (0.9)	96.5 (0.8)
Average holdings per 100 students at the end of the 1992–93 school year	19.0 (0.8)	15.9 (1.1)	16.7 (2.7)	16.3 (1.6)	14.4 (1.7)	17.5 (2.6)	24.8 (1.0)	33.0 (3.0)	26.6 (1.6)	25.6 (2.0)	25.3 (1.4)
Books (number of volumes)	90.1 (0.7)	88.5 (1.0)	79.2 (3.4)	89.1 (1.6)	88.4 (2.0)	92.1 (2.2)	94.0 (1.0)	88.4 (2.7)	96.4 (1.1)	96.4 (0.9)	96.5 (0.8)
Current serial subscriptions (print/microfilm)	19.0 (0.8)	15.9 (1.1)	16.7 (2.7)	16.3 (1.6)	14.4 (1.7)	17.5 (2.6)	24.8 (1.0)	33.0 (3.0)	26.6 (1.6)	25.6 (2.0)	25.3 (1.4)
Video materials (tape and disc)	2,585 (57)	2,467 (81)	5,774 (355)	2,721 (124)	1,600 (46)	1,340 (37)	2,891 (101)	10,071 (815)	2,809 (79)	1,822 (50)	1,354 (22)
Other audiovisual materials	9 (2)	7 (2)	25 (3)	7 (2)	4 (2)	3 (2)	14 (1)	55 (4)	14 (2)	8 (2)	5 (0)
Microcomputer software ..	38 (2)	35 (2)	91 (12)	36 (4)	24 (2)	20 (2)	46 (2)	129 (15)	49 (3)	35 (2)	23 (1)
CD-ROM titles	116 (4)	114 (6)	183 (37)	122 (8)	96 (9)	73 (8)	117 (7)	267 (34)	123 (17)	102 (10)	74 (4)
Locally budgeted expenditures ³ per student, 1992–93	18 (1)	20 (1)	60 (13)	22 (2)	11 (1)	10 (1)	12 (1)	47 (11)	8 (1)	8 (1)	6 (0)
Books	1 (2)	1 (2)	2 (2)	1 (2)	1 (2)	0 (2)	2 (2)	9 (1)	1 (2)	1 (2)	1 (2)
Current serial subscriptions (print/microfilm)	\$8.52 (0.23)	\$7.80 (0.25)	\$17.30 (1.3)	\$7.95 (0.3)	\$6.36 (0.4)	\$4.49 (0.3)	\$10.06 (0.4)	\$28.34 (2.3)	\$11.20 (0.7)	\$6.84 (0.4)	\$5.30 (0.2)
Video materials (tape and disc)	2.18 (0.05)	1.49 (0.06)	4.66 (0.47)	1.53 (0.08)	0.89 (0.05)	0.76 (0.06)	4.15 (0.14)	13.59 (1.05)	4.11 (0.22)	2.84 (0.15)	2.02 (0.06)
Other audiovisual materials	1.24 (0.04)	1.04 (0.05)	2.58 (0.37)	0.97 (0.05)	0.91 (0.07)	0.67 (0.07)	1.77 (0.10)	5.67 (0.67)	1.75 (0.15)	1.26 (0.11)	0.89 (0.05)
Microcomputer software ..	0.82 (0.04)	0.77 (0.06)	1.30 (0.49)	0.79 (0.07)	0.70 (0.06)	0.53 (0.07)	0.87 (0.07)	2.63 (0.53)	0.89 (0.09)	0.64 (0.08)	0.45 (0.03)
CD-ROM titles	1.09 (0.09)	0.89 (0.07)	1.95 (0.47)	0.92 (0.09)	0.77 (0.13)	0.41 (0.06)	1.50 (0.35)	7.52 (3.10)	1.07 (0.13)	0.69 (0.10)	0.46 (0.03)
Expenditures (all sources) per student, 1992–93	0.63 (0.05)	0.38 (0.06)	0.92 (0.28)	0.33 (0.04)	0.42 (0.16)	0.16 (0.02)	1.24 (0.09)	3.76 (0.55)	1.24 (0.13)	0.84 (0.10)	0.69 (0.04)
Total, library/media materials	17.18 (0.35)	14.86 (0.45)	35.43 (2.38)	15.31 (0.58)	11.19 (0.55)	8.51 (0.43)	22.71 (0.82)	69.98 (5.56)	23.74 (0.98)	14.91 (0.71)	11.72 (0.35)
Microcomputer hardware	3.84 (0.25)	3.43 (0.33)	10.82 (3.37)	2.91 (0.30)	3.10 (0.49)	1.72 (0.26)	4.73 (0.46)	7.81 (2.43)	5.68 (1.15)	4.06 (0.71)	3.36 (0.39)
Audiovisual equipment	2.24 (0.15)	2.00 (0.17)	5.21 (1.73)	1.71 (0.13)	1.88 (0.24)	1.45 (0.26)	2.98 (0.46)	10.44 (4.10)	2.75 (0.24)	1.70 (0.15)	1.59 (0.10)
On-line database searching/ searching electronic communications	0.30 (0.04)	0.25 (0.06)	0.30 (0.13)	0.27 (0.08)	0.26 (0.15)	0.11 (0.03)	0.43 (0.05)	0.79 (0.31)	0.62 (0.14)	0.27 (0.05)	0.26 (0.04)

¹ During the most recent full week of school.

² Standard error less than .5.

³ Locally budgeted expenditures exclude federal gifts and grants.

—Data not available.

NOTE.—Percentages are based on schools that have library/media centers. In school year 1990–91, 96 percent of public schools had library/media centers. Standard errors appear in parentheses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993–94, unpublished data. (This table was prepared August 1997.)

Table 423.—Selected statistics on public school library/media centers, by state: 1993–94

State or other area	Percent of centers offering selected services/equipment						Books held per 100 students	Total students using library per 100 students each week ¹	Total expenditures for materials per student	Expenditure for micro-computers for library per student	Expenditure for audio-visual materials for library per student
	Computer with modem	Automated catalog	Database searching with CD-ROM	On-line database searching	Compact disc for indices, etc.	Connection to the Internet					
1	2	3	4	5	6	7	8	9	10	11	12
United States	34.3 (1.0)	24.0 (0.9)	31.2 (0.8)	9.4 (0.5)	46.7 (1.1)	12.0 (0.6)	2,585 (57)	83.4 (0.4)	\$17.18 (0.35)	\$3.84 (0.25)	\$2.24 (0.15)
Alabama	33.0 (4.2)	37.6 (5.9)	29.3 (4.0)	5.7 (2.0)	44.1 (4.6)	3.2 (1.5)	1,510 (61)	76.3 (2.2)	11.22 (0.62)	1.91 (0.39)	0.91 (0.22)
Alaska	34.7 (3.6)	34.3 (4.0)	39.7 (4.7)	6.8 (1.9)	44.6 (4.5)	15.1 (2.3)	4,167 (260)	85.0 (2.0)	47.38 (5.86)	9.76 (2.55)	1.94 (0.30)
Arizona	28.1 (3.5)	38.3 (5.3)	28.0 (4.0)	5.6 (2.2)	43.0 (4.4)	6.0 (1.9)	2,552 (211)	81.0 (3.3)	17.55 (3.05)	4.66 (1.37)	1.56 (0.31)
Arkansas	19.0 (4.0)	18.7 (4.0)	20.5 (4.1)	5.6 (2.4)	29.7 (4.6)	8.5 (2.5)	2,377 (355)	78.3 (2.8)	15.03 (1.45)	1.92 (0.53)	1.56 (0.29)
California	19.9 (4.3)	14.0 (3.4)	23.4 (3.7)	3.1 (1.0)	38.0 (5.7)	6.2 (2.3)	1,751 (193)	77.9 (2.7)	7.26 (1.00)	3.13 (0.87)	0.59 (0.17)
Colorado	47.0 (4.7)	43.6 (5.7)	43.3 (5.5)	30.7 (4.7)	60.7 (5.5)	16.3 (3.5)	2,190 (177)	80.6 (2.5)	16.42 (1.81)	3.01 (0.57)	1.63 (0.25)
Connecticut	43.8 (6.5)	12.8 (2.7)	45.4 (5.3)	17.9 (3.8)	54.4 (6.0)	6.5 (2.6)	2,289 (129)	88.0 (2.2)	15.71 (2.06)	2.84 (1.01)	1.21 (0.21)
Delaware	41.8 (3.6)	22.5 (3.0)	34.7 (3.5)	14.4 (2.5)	48.2 (3.5)	5.7 (2.0)	1,587 (84)	80.5 (2.3)	8.68 (0.87)	1.63 (0.24)	0.64 (0.23)
District of Columbia	23.5 (4.0)	4.4 (2.2)	25.4 (2.8)	10.4 (3.3)	31.2 (3.2)	1.7 (1.1)	1,578 (74)	65.6 (2.9)	8.06 (0.69)	0.49 (0.13)	1.46 (0.30)
Florida	45.3 (3.8)	29.8 (3.3)	39.9 (3.6)	11.8 (2.8)	71.0 (4.0)	21.1 (3.4)	1,855 430	76.6 (2.6)	13.61 (1.98)	1.85 (0.29)	2.30 (0.33)
Georgia	29.8 (4.7)	48.2 (4.4)	34.5 (4.6)	13.6 (2.6)	46.6 (4.7)	10.8 (2.7)	1,535 (72)	83.9 (1.6)	13.02 (0.65)	2.99 (0.71)	2.21 (0.38)
Hawaii	75.3 (5.3)	27.1 (4.4)	47.7 (5.7)	24.3 (4.9)	64.8 (4.9)	29.4 (5.0)	1,592 (100)	83.3 (2.6)	10.90 (1.01)	2.77 (0.46)	1.59 (0.42)
Idaho	29.9 (4.2)	15.4 (4.0)	21.6 (4.4)	6.2 (2.3)	32.1 (5.1)	8.6 (3.1)	2,457 (289)	86.6 (1.9)	12.20 (1.24)	2.50 (0.63)	1.12 (0.24)
Illinois	32.2 (3.5)	17.7 (3.8)	23.0 (3.4)	7.9 (1.7)	36.6 (4.2)	7.1 (2.2)	2,517 (264)	85.7 (1.8)	13.40 (1.34)	4.09 (1.48)	1.59 (0.19)
Indiana	29.9 (6.7)	31.0 (4.9)	32.0 (5.9)	2.4 (0.7)	66.1 (6.3)	5.5 (1.2)	2,518 (387)	86.2 (2.4)	14.40 (1.12)	12.45 (3.24)	2.20 (0.45)
Iowa	38.8 (6.4)	17.4 (5.0)	44.2 (5.7)	14.6 (3.6)	71.2 (5.7)	8.6 (3.1)	4,549 (698)	91.0 (1.8)	23.04 (2.23)	5.14 (2.03)	2.78 (0.61)
Kansas	24.9 (3.0)	31.5 (4.9)	20.9 (3.1)	9.7 (2.0)	46.6 (4.5)	10.6 (2.5)	3,797 (218)	89.1 (1.8)	30.85 (2.76)	11.16 (2.26)	2.93 (0.49)
Kentucky	30.1 (6.2)	33.1 (7.0)	32.3 (5.5)	4.3 (2.2)	60.3 (6.3)	5.3 (2.4)	1,732 (110)	84.8 (2.3)	15.16 (1.08)	2.32 (0.51)	2.40 (0.31)
Louisiana	24.2 (3.9)	13.9 (3.5)	21.9 (3.4)	2.3 (0.8)	28.1 (3.8)	6.2 (2.4)	1,784 (74)	64.8 (3.9)	16.18 (3.82)	1.43 (0.42)	0.50 (0.08)
Maine	33.3 (5.4)	18.9 (4.4)	25.5 (3.8)	5.4 (2.0)	38.9 (6.7)	5.4 (1.6)	2,331 (169)	89.4 (2.7)	17.83 (2.74)	2.21 (0.58)	0.64 (0.16)
Maryland	41.0 (3.9)	15.4 (3.4)	31.8 (4.5)	22.3 (3.1)	46.2 (4.7)	32.6 (3.5)	1,510 (70)	87.0 (1.8)	11.70 (0.73)	0.25 (0.06)	1.65 (0.45)
Massachusetts	38.2 (4.9)	9.1 (1.6)	45.3 (4.8)	8.9 (1.6)	46.3 (4.8)	24.1 (3.8)	2,523 (224)	74.8 (3.9)	10.14 (1.22)	1.50 (0.29)	1.77 (0.52)
Michigan	42.2 (7.6)	12.1 (3.9)	38.1 (6.3)	10.2 (3.8)	57.9 (6.1)	15.1 (5.3)	1,820 (100)	83.5 (4.1)	13.36 (2.13)	1.62 (0.55)	1.35 (0.39)
Minnesota	35.6 (4.8)	53.4 (6.1)	52.9 (6.1)	13.8 (3.0)	69.0 (5.6)	17.3 (3.6)	3,114 (253)	86.5 (2.8)	22.39 (3.60)	6.01 (0.96)	4.93 (1.70)
Mississippi	9.4 (2.0)	5.2 (2.1)	14.2 (3.9)	3.0 (1.4)	23.2 (3.6)	3.1 (1.3)	1,593 (69)	74.6 (2.5)	16.26 (4.13)	1.58 (0.62)	1.30 (0.30)
Missouri	31.3 (4.3)	39.4 (6.7)	31.4 (5.0)	17.8 (3.9)	46.0 (5.9)	15.7 (4.2)	2,681 (232)	81.4 (2.6)	16.95 (1.64)	2.80 (0.90)	1.23 (0.20)
Montana	50.8 (4.3)	20.6 (3.1)	43.7 (4.1)	17.4 (3.3)	58.2 (3.6)	6.2 (2.0)	9,562 (1,005)	89.5 (2.3)	67.92 (8.98)	15.79 (6.03)	5.61 (1.22)
Nebraska	31.6 (5.0)	29.0 (4.9)	36.3 (5.7)	12.1 (2.5)	58.8 (6.0)	15.8 (3.0)	7,103 (817)	90.3 (2.7)	41.70 (4.30)	23.16 (10.55)	13.52 (6.68)
Nevada	18.4 (4.0)	48.2 (5.5)	32.2 (4.5)	3.0 (1.3)	37.1 (4.2)	9.4 (2.9)	1,827 (168)	87.0 (1.7)	11.15 (1.00)	1.46 (0.38)	0.77 (0.14)
New Hampshire	43.9 (6.6)	21.4 (4.8)	39.8 (6.6)	8.2 (2.6)	51.2 (5.9)	17.4 (4.4)	2,221 (182)	87.1 (1.8)	18.97 (1.75)	2.83 (0.86)	1.41 (0.24)
New Jersey	39.1 (6.8)	28.5 (6.5)	30.2 (6.4)	7.2 (1.4)	46.2 (7.2)	5.2 (1.3)	2,954 (400)	84.2 (3.0)	22.91 (3.96)	3.52 (1.37)	2.05 (0.88)
New Mexico	32.8 (6.1)	21.9 (5.3)	32.0 (4.3)	3.9 (1.5)	43.1 (5.5)	7.8 (2.4)	2,533 (223)	82.9 (2.8)	16.80 (3.05)	1.55 (0.44)	1.73 (0.32)
New York	39.5 (5.5)	14.3 (3.9)	25.2 (3.4)	12.5 (2.4)	44.8 (5.1)	16.0 (3.6)	2,207 (213)	82.0 (3.4)	13.67 (1.21)	1.56 (0.46)	1.15 (0.35)
North Carolina	40.4 (4.6)	29.4 (4.0)	42.0 (4.3)	10.8 (1.7)	65.0 (4.1)	7.9 (3.2)	1,630 (50)	80.8 (2.4)	14.19 (0.94)	4.39 (0.53)	2.10 (0.28)
North Dakota	65.8 (5.3)	18.0 (3.6)	27.3 (5.1)	39.1 (5.7)	41.1 (6.5)	36.8 (5.5)	6,607 (689)	93.0 (1.3)	29.45 (2.25)	3.77 (0.84)	5.02 (1.77)
Ohio	33.1 (7.1)	12.9 (5.0)	16.9 (3.9)	3.3 (1.1)	31.9 (6.7)	7.1 (2.3)	3,796 (762)	86.5 (2.3)	11.03 (1.48)	0.75 (0.25)	1.53 (0.75)
Oklahoma	20.1 (2.7)	32.7 (3.8)	32.5 (3.5)	6.7 (1.7)	44.1 (4.2)	4.0 (1.7)	2,851 (163)	84.2 (1.5)	36.26 (4.69)	3.46 (0.60)	7.51 (4.23)
Oregon	38.6 (5.8)	39.2 (5.2)	51.5 (6.7)	18.9 (4.7)	49.5 (6.5)	11.7 (4.2)	3,154 (362)	84.3 (3.2)	21.32 (2.14)	7.59 (2.49)	2.75 (0.86)
Pennsylvania	33.9 (6.9)	17.3 (4.0)	32.6 (5.5)	2.5 (1.1)	39.2 (6.4)	6.4 (3.1)	2,562 (203)	89.6 (2.6)	15.33 (2.09)	2.23 (0.60)	1.97 (0.67)
Rhode Island	25.0 (4.9)	11.8 (3.2)	13.0 (3.5)	1.0 (0.6)	21.7 (4.8)	18.6 (4.2)	1,835 (232)	84.0 (2.5)	8.58 (1.51)	0.23 (0.10)	0.34 (0.14)
South Carolina	44.0 (5.4)	46.4 (5.0)	39.4 (5.7)	6.9 (1.7)	55.4 (7.1)	13.5 (4.1)	1,655 (133)	80.3 (3.2)	11.01 (0.71)	2.39 (0.55)	1.03 (0.19)
South Dakota	56.2 (6.8)	12.6 (3.4)	37.7 (6.2)	23.1 (4.2)	60.2 (5.5)	9.0 (2.7)	5,049 (542)	89.8 (2.0)	45.53 (5.37)	8.26 (1.61)	3.73 (1.41)
Tennessee	15.1 (4.3)	18.9 (5.1)	16.6 (4.5)	2.5 (2.3)	34.9 (6.5)	3.6 (1.9)	1,677 (102)	85.4 (2.2)	8.60 (0.68)	2.65 (1.04)	0.91 (0.20)
Texas	39.4 (4.6)	20.5 (4.2)	27.2 (3.1)	9.9 (2.8)	33.9 (3.8)	24.7 (4.2)	1,885 (123)	83.3 (2.0)	18.94 (1.79)	3.75 (1.18)	2.95 (0.40)
Utah	22.2 (3.6)	37.4 (4.1)	28.6 (3.6)	5.1 (2.3)	39.1 (3.6)	6.7 (1.9)	1,557 (105)	79.5 (2.2)	9.08 (0.95)	1.62 (0.26)	1.82 (0.32)
Vermont	47.0 (4.9)	27.2 (5.6)	35.3 (4.2)	14.5 (3.3)	51.9 (4.8)	32.2 (3.4)	3,155 179	87.5 (1.8)	34.53 (4.95)	6.18 (1.57)	2.90 (0.52)
Virginia	61.7 (8.3)	35.5 (6.1)	38.6 (5.8)	10.6 (2.9)	72.4 (7.0)	31.4 (5.6)	1,974 (108)	88.2 (2.2)	15.20 (1.09)	3.48 (0.66)	3.71 (1.01)
Washington	40.2 (5.2)	35.7 (5.6)	43.1 (3.6)	11.7 (2.9)	53.1 (4.9)	13.0 (2.6)	2,004 (84)	89.7 (1.3)	14.70 (1.27)	3.34 (0.69)	1.52 (0.29)
West Virginia	24.7 (6.0)	16.7 (4.2)	18.0 (4.0)	8.3 (3.5)	31.0 (5.5)	6.4 (3.2)	2,039 (201)	76.0 (4.7)	7.37 (1.41)	0.77 (0.25)	0.17 (—)
Wisconsin	34.2 (6.5)	27.2 (4.7)	36.1 (5.0)	14.8 (3.8)	57.1 (6.1)	9.0 (2.6)	2,895 (157)	86.5 (2.8)	23.99 (1.18)	5.40 (1.55)	4.10 (0.74)
Wyoming	39.0 (3.4)	28.0 (4.2)	32.1 (5.7)	8.1 (2.5)	41.7 (4.5)	6.6 (2.3)	10,729 (1,185)	83.5 (3.4)	46.04 (5.36)	3.23 (0.59)	3.92 (0.85)

¹ During the most recent full week of school.
—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993–94, unpublished data. (This table was prepared August 1997.)

NOTE.—Percentages are based on schools that have library/media centers. In school year 1990–91, 96 percent of public schools had library/media centers. Standard errors appear in parentheses.

Table 424.—Percent of public and private schools having access to selected telecommunication capabilities, by location of access site and control of school: 1995

Telecommunications capabilities	Percent of schools having access	Percent of schools with telecommunications access, by location ¹				
		Administrative offices	Teacher workrooms	Classrooms	Computer labs	Library/media centers
1	2	3	4	5	6	7
All public schools						
Computer with any telecommunication capabilities via local area network	77	73	20	45	71	64
Computer with any telecommunication capabilities via modem	76	61	10	30	41	64
Computer with any telecommunication capabilities via wide area network	61	58	14	35	41	68
Broadcast television	71	35	28	82	47	88
Cable television	76	33	25	72	42	91
Closed circuit television	28	50	32	91	60	89
Two-way video with two-way audio	13	24	17	57	37	69
One-way video with two-way audio or computer link	7	26	15	63	41	54
All private schools						
Computer with any telecommunication capabilities via local area network	43	71	18	33	58	35
Computer with any telecommunication capabilities via modem	48	70	14	24	38	33
Computer with any telecommunication capabilities via wide area network	29	59	15	26	41	40
Broadcast television	52	24	23	81	27	59
Cable television	37	21	21	75	29	60
Closed circuit television	5	32	29	99	51	71
Two-way video with two-way audio	5	9	13	50	54	44
One-way video with two-way audio or computer link	2	32	21	66	39	46

¹ Location estimates are based on those schools having access to each type of telecommunication capability. Percents of schools reporting telecommunication locations do not sum to 100 because many schools have access in more than one location.

NOTE.—Data are derived from a sample survey and are subject to sampling error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, *Advanced Telecommunications in U.S. Public Elementary and Secondary Schools, 1995*; and *Advanced Telecommunications in U.S. Private Schools, K-12, Fall 1995*. (This table was prepared September 1997.)

Table 425.—Percent of public schools and school classrooms having access to the Internet, by school characteristics: 1994 to 1998

Schools, computers, instruction rooms, and access	All public schools	Instructional level ¹		Size of school enrollment			Metropolitan status				Percent of students eligible for free or reduced-price lunch			
		Elementary	Secondary	Less than 300	300 to 999	1,000 or more	City	Urban fringe	Town	Rural	Less than 11 percent	11 to 30 percent	31 to 70 percent	71 percent or more
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Estimated number of schools														
1995	77,853	57,705	18,083	20,673	50,044	7,136	17,906	18,464	19,539	21,944	13,192	21,876	28,017	14,651
1997	79,125	59,695	19,430	20,540	51,169	7,416	21,071	23,419	12,637	21,998	10,677	21,686	32,666	14,097
Percent of schools having access to the Internet														
1994	35	30	49	30	35	58	40	38	29	35	—	—	—	—
1995	50	46	65	39	52	69	47	59	47	48	62	59	47	31
1996	65	61	77	57	66	80	64	75	61	60	78	72	58	53
1997	78	75	89	75	78	89	74	78	84	79	88	83	78	63
1998	89	88	94	87	89	95	92	85	90	92	87	94	91	80
Number of computers, in thousands														
1995 ²	5,621	3,453	2,021	850	3,600	1,171	1,497	1,526	1,404	1,195	1,017	1,712	1,919	951
1997	5,959	3,701	2,258	839	3,767	1,353	1,727	2,084	934	1,214	1,008	1,782	2,211	959
Mean number of computers per school														
1995	72	60	112	41	72	164	84	83	72	54	77	78	68	65
1997	75	62	116	41	74	183	82	89	74	55	94	82	68	68
Number of computers with Internet access, in thousands														
1995	448	232	187	59	315	73	96	131	126	94.279	111	163	123	39
Percent of all computers with access to the Internet														
1995	8	7	9	7	9	6	6	9	9	8	11	10	6	4
Number of instructional rooms, ³ in thousands														
1997	2,625	1,720	906	335	1,725	566	830	902	388	505	412	758	976	480
Percent of instructional rooms ³ with access to the Internet														
1994	3	3	4	3	3	3	4	4	3	3	—	—	—	—
1995	8	8	8	9	8	4	6	8	8	8	9	10	7	3
1996	14	13	16	15	13	16	12	16	14	14	18	16	14	7
1997	27	24	32	27	28	25	20	29	34	30	36	32	27	14
1998	51	51	52	54	53	45	47	50	55	57	62	53	52	39

¹ Excludes combined elementary/secondary schools because of small sample size.

² Includes computers used for instructional or administrative purposes.

³ Includes all classrooms, computer labs, and library/media centers.

—Data not available.

NOTE.—Data are derived from sample surveys and are subject to sampling error. Details may not add to totals because of rounding of weighted estimates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, *Internet Access in U.S. Public Elementary and Secondary Schools, and Classrooms: 1994–98*; Advanced Telecommunications in U.S. Public Elementary and Secondary Schools, 1995; and unpublished data. (This table was prepared March 1999.)

Table 426.—General statistics of college and university libraries: 1974–75 to 1994–95

Item	1974–75 ¹	1975–76 ¹	1976–77 ¹	1978–79 ¹	1981–82	1984–85	1987–88	1991–92	1994–95
1	2	3	4	5	6	7	8	9	10
Number of libraries	2,972	2,987	3,058	3,122	3,104	3,322	3,438	3,274	3,639
Transactions, general collection	—	—	—	—	—	—	—	—	186,092
Transactions, reserve collection	—	—	—	—	—	—	—	—	49,567
Total enrollment, in thousands ²	10,322	11,291	11,121	11,392	12,372	12,242	12,767	14,359	14,279
Full-time-equivalent enrollment, in thousands ²	7,805	8,480	8,313	8,348	9,015	8,952	9,230	10,361	10,348
Collections, thousands of units									
Number of volumes at end of year	447,059	468,033	481,442	519,895	567,826	631,727	718,504	749,429	792,707
Number of volumes added during year	23,242	22,977	22,367	21,608	19,507	20,658	21,907	20,982	22,460
Number of serial subscriptions ³	4,434	4,618	4,670	4,775	4,890	6,317	6,416	6,966	6,780
Microform titles at end of year	—	—	—	—	—	—	—	—	160,188
Computer files at end of year	—	—	—	—	—	—	—	—	480
Library staff, in full-time equivalents									
Total staff in regular positions ⁴	56,836	56,852	57,087	58,416	58,476	58,476	67,251	67,166	68,920
FTE student enrollment per FTE staff	137.3	149.2	145.6	142.9	154.2	153.1	137.2	154.3	150.1
Librarians and professional staff	23,530	23,104	23,308	23,676	23,816	21,822	25,115	26,341	27,376
Other paid staff	33,306	33,748	33,779	34,740	34,660	38,026	40,733	40,421	41,227
Contributed services	—	—	—	—	—	—	1,403	404	317
Student assistants	—	—	—	—	—	—	33,821	29,075	29,077
Hours of student and other assistance, in thousands	34,687	36,725	39,950	39,552	40,068	28,360	—	—	—
Library operating expenditures (excluding capital outlay)									
Operating expenditures, total, in thousands	\$1,091,784	\$1,180,128	\$1,259,637	\$1,502,158	\$1,943,769	\$2,404,524	\$2,770,075	\$3,648,654	\$4,317,847
Salaries ⁵	592,568	649,374	698,090	824,438	1,081,894	1,156,138	1,451,551	1,889,368	2,058,375
Hourly wages	61,474	66,175	68,683	79,535	100,847	—	—	—	—
Fringe benefits	—	—	—	—	—	231,209	—	—	238,984
Preservation	22,206	22,375	22,521	25,274	30,351	32,939	34,144	43,126	47,296
Furniture/equipment	—	—	—	—	—	—	—	—	56,432
Computer hardware/software	—	—	—	—	—	—	—	—	126,936
Utilities/networks/consortia	—	—	—	—	—	—	—	—	81,686
Collections	327,904	357,544	373,699	450,180	561,199	750,282	891,281	1,197,293	1,374,407
Print materials	—	—	—	—	—	—	—	420,930	451,988
Serial subscriptions	—	—	—	—	—	—	—	639,128	703,463
Microforms	—	—	—	—	—	—	—	43,666	61,702
Audiovisual materials	—	—	—	—	—	—	—	23,879	29,375
Machine readable materials	—	—	—	—	—	—	—	29,093	72,735
Collections, loans	—	—	—	—	—	—	—	—	12,440
Other collection expenditures	—	—	—	—	—	—	—	40,596	42,704
Other library operating expendi- tures	87,632	84,660	96,643	122,731	169,478	233,957	393,099	518,867	333,732
Operating expenditures per FTE student	140	139	152	180	216	269	300	352	417
Operating expenditures per FTE student in constant 1994–95 dollars	406	377	388	395	345	382	390	383	417
Operating expenditures, total, in percents	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Salaries ⁵	54.3	55.0	55.4	54.9	55.7	48.1	52.4	51.8	47.7
Hourly wages	5.6	5.6	5.5	5.3	5.2	—	—	—	—
Fringe benefits	—	—	—	—	—	9.6	—	—	5.5
Preservation	2.0	1.9	1.8	1.7	1.6	1.4	1.2	1.2	1.1
Collections	30.0	30.3	29.7	30.0	28.9	31.2	32.2	32.8	31.8
Other library operating expendi- tures	8.0	7.2	7.7	8.2	8.7	9.7	14.2	14.2	13.9
Library operating expenditures as percent of total institutional expenditures for educational and general purposes	3.9	3.8	3.8	3.7	3.5	3.4	3.2	3.0	2.9

¹ Includes data for U.S. territories.² Fall enrollment for the academic year specified.³ Data are for end of year.⁴ Excludes student assistants.⁵ Includes expenditures for fringe benefits (except for 1984–85 and 1987–88) and salary equivalents of contributed services staff.

—Data not available.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Library Statistics of Colleges and Universities*, various years; and Integrated Postsecondary Education Data System, "Academic Library Survey." (This table was prepared July 1997.)

Table 427.—Selected statistics on the collections, staff, and operating expenditures of 60 large college and university libraries: 1996

Institution	Rank order, by number of volumes	Number of volumes at end of year, in thousands	Full-time-equivalent staff		Operating expenditures, in thousands		Public service hours per week	Gate count per week	Reference transactions per week
			Total	Professional	Total	Salaries and wages			
1	2	3	4	5	6	7	8	9	10
Harvard University (MA)	1	13,370	1,125	404	\$66,319	\$35,061	104	—	—
Yale University (CT)	2	10,828	615	204	41,759	16,974	111	—	—
University of Illinois, Urbana Campus	3	8,840	531	160	23,935	12,556	107	—	13,030
University of Texas, Austin	4	7,330	600	142	22,808	12,378	139	144,750	10,947
University of California, Berkeley	5	6,982	569	146	32,682	17,753	82	—	—
Columbia University, Main Division (NY)	6	6,792	544	168	28,947	15,283	104	—	—
University of Michigan, Ann Arbor	7	6,774	653	149	32,600	14,560	147	—	—
University of California, Los Angeles	8	6,773	644	128	37,385	18,580	87	127,904	14,514
Stanford University (CA)	9	6,717	559	175	36,680	22,213	49	—	3,476
University of Chicago (IL)	10	5,854	334	72	20,907	9,054	111	39,223	1,502
University of Wisconsin, Madison	11	5,738	543	156	28,003	14,524	131	133,034	7,834
University of Minnesota, Twin Cities	12	5,376	446	104	26,696	12,663	105	—	5,100
University of Washington	13	5,259	452	132	22,369	11,944	106	—	—
Princeton University (NJ) ¹	14	5,186	400	121	23,608	11,556	120	—	—
Ohio State University, Main Campus	15	4,978	420	101	20,734	9,834	107	—	17,367
Cornell University (NY)	16	4,928	444	145	21,405	10,263	79	—	3,428
Indiana University, Bloomington	17	4,780	476	139	23,037	11,025	101	80,429	12,455
University of North Carolina, Chapel Hill	18	4,675	423	120	22,121	10,255	146	—	5,472
Duke University (NC)	19	4,534	329	104	21,743	9,268	122	—	5,053
University of Pennsylvania	20	4,438	379	107	24,242	10,924	137	37,945	7,202
University of Arizona	21	4,343	367	92	18,753	8,099	168	52,008	3,054
University of Virginia, Main Campus	22	4,276	363	97	19,894	9,075	116	—	4,000
Michigan State University	23	4,047	282	63	15,030	7,198	114	—	—
Northwestern University (IL)	24	3,840	373	107	17,272	8,412	123	36,150	2,283
University of Iowa	25	3,752	309	102	17,414	8,294	96	—	—
New York University	26	3,508	443	149	24,643	11,906	115	39,000	7,570
University of Pittsburgh, Main Campus (PA)	27	3,401	382	94	19,893	8,137	145	52,647	6,821
University of Georgia	28	3,392	364	85	16,125	7,463	104	32,500	3,296
University of Southern California	29	3,351	357	108	20,570	10,280	168	55,182	3,867
University of Kansas, Main Campus	30	3,270	273	79	12,407	5,608	100	—	—
University of Florida	31	3,258	390	108	16,835	8,389	107	53,607	4,821
Washington University (MO)	32	3,164	285	75	16,084	7,083	126	33,517	10,189
State U. of New York, Buffalo, Main Campus	33	2,991	252	95	13,583	6,836	90	63,250	6,170
University of Hawaii, Manoa	34	2,972	228	62	11,191	6,556	81	56,013	3,544
Wayne State University (MI)	35	2,960	269	82	13,901	6,667	97	42,781	5,887
Johns Hopkins University (MD)	36	2,955	292	85	18,721	7,726	106	28,690	2,665
Louisiana State U. & A&M & Hebert Laws Center	37	2,950	222	52	8,885	4,380	98	25,035	3,112
University of Rochester (NY)	38	2,922	218	74	10,306	4,626	118	25,000	1,166
Arizona State University	39	2,912	298	84	15,953	7,139	102	35,000	6,055
Brown University (RI)	40	2,810	239	80	11,877	6,090	111	27,040	2,383
University of South Carolina at Columbia	41	2,769	257	73	13,445	5,814	111	15,460	4,156
University of Missouri, Columbia	42	2,769	246	59	12,468	4,878	105	40,000	3,654
University of Massachusetts at Amherst	43	2,762	185	51	10,770	5,623	105	28,600	3,370
Southern Illinois University, Carbondale	44	2,694	242	50	10,562	4,907	92	15,540	3,413
Syracuse University, Main Campus (NY)	45	2,692	256	70	10,584	5,112	105	16,506	1,372
Pennsylvania State University, Main Campus	46	2,680	410	75	19,971	10,213	168	73,366	8,039
University of Colorado, Boulder	47	2,672	254	62	15,577	6,661	109	65,387	7,343
University of Kentucky	48	2,634	332	100	15,082	7,208	142	47,810	4,441
University of Utah	49	2,557	327	73	14,689	6,599	100	44,546	3,798
North Carolina State University at Raleigh	50	2,540	280	77	13,426	5,452	107	34,365	3,032
University of Maryland, College Park Campus	51	2,539	316	85	15,720	7,857	136	70,021	9,968
University of California, Davis	52	2,533	274	47	14,514	7,300	87	22,370	4,630
University of California, San Diego	53	2,470	329	72	17,529	9,422	108	51,250	4,027
Massachusetts Institute of Technology	54	2,449	220	83	11,554	6,168	108	25,000	2,060
Brigham Young University (UT)	55	2,412	294	101	12,986	6,473	101	73,000	12,487
Auburn University, Main Campus (AL)	56	2,401	177	49	8,272	3,645	99	20,825	3,359
Vanderbilt University (TN)	57	2,388	287	78	14,288	6,307	111	16,740	2,445
University of Nebraska at Lincoln	58	2,385	216	53	10,839	4,769	96	17,503	2,273
University of Oklahoma, Norman Campus	59	2,325	150	39	7,323	3,005	102	31,000	4,218
Texas A&M University	60	2,311	334	77	16,094	6,579	94	57,437	6,215

¹ 1994 data.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data Survey, "1996 Academic Library System-Early Release." (This table was prepared September 1999.)

Table 428.—General statistics of public libraries, by population of legal service area: 1996

Item	Population of legal service area						
	Total	Under 10,000	10,000 to 49,999	50,000 to 99,999	100,000 to 249,999	250,000 to 499,999	500,000 and over
1	2	3	4	5	6	7	8
Number of public library service outlets	17,013	5,728	4,153	1,772	2,149	1,110	2,101
Central libraries	8,923	5,402	2,532	496	334	82	77
Branch libraries	7,124	253	1,292	1,077	1,626	957	1,919
Bookmobiles	966	73	329	199	189	71	105
Collections, in thousands							
Books and serial volumes ¹	711,013	96,938	173,756	84,758	103,325	72,649	179,585
Audio and video materials and films	38,258	3,806	8,971	4,497	5,916	3,540	11,527
Serial subscriptions	1,857	272	482	218	242	161	481
Paid staff, in full-time equivalents							
Librarians	39,096	5,475	10,100	4,550	5,568	3,987	9,417
Librarians with ALA-MLS ²	27,353	1,118	6,279	3,420	4,516	3,241	8,779
Other staff	78,717	4,898	18,891	10,546	13,774	8,539	22,069
Income, in thousands							
Total operating income	\$5,904,967	\$397,530	\$1,361,167	\$729,251	\$958,946	\$688,360	\$1,769,713
Percentage distribution							
Source of operating income							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal ³	1.0	1.4	0.6	0.9	1.1	0.9	1.2
State	12.2	9.7	11.3	13.5	10.1	10.7	14.5
Local	78.1	73.5	78.8	78.5	81.9	82.6	74.9
Other	8.7	15.4	9.3	7.1	6.9	5.8	9.5

¹ Some data are different from other tables due to a different population base. NOTE.—Because of rounding, details may not add to totals. Totals may be underestimated due to nonresponse on item or legal service area.
² ALA-MLS=A master's degree from a graduate library education program accredited by the American Library Association (ALA). SOURCE: U.S. Department of Education, National Center for Education Statistics, *Public Libraries in the United States: FY 1996*. (This table was prepared August 1999).
³ Excludes some federal funds received through state library agencies.

Table 429.—Public libraries, books and serial volumes, library visits, and reference transactions, by state: 1996

State	Number of public libraries	Number of books and serial volumes ¹ (in thousands)	Number of books and serial volumes per capita	Library visits per capita ²	Circulation per capita	Public library reference transactions per capita ³	State	Number of public libraries	Number of books and serial volumes ¹ (in thousands)	Number of books and serial volumes per capita	Library visits per capita ²	Circulation per capita	Public library reference transactions per capita ³
1	2	3	4	5	6	7	1	2	3	4	5	6	7
United States	8,946	711,013	2.8	4.0	6.5	1.1							
Alabama	205	8,359	2.1	3.3	3.9	0.5	Missouri	148	20,408	4.1	4.3	7.9	1.0
Alaska	85	2,024	3.3	4.8	6.3	0.7	Montana	82	2,547	3.1	3.7	6.1	0.7
Arizona	40	8,096	2.0	4.6	6.5	1.1	Nebraska	230	4,941	3.5	5.2	7.6	0.7
Arkansas	37	4,925	2.2	2.5	4.2	0.4	Nevada	23	3,556	2.2	3.8	5.0	0.8
California	171	59,913	1.9	3.7	4.7	1.1	New Hampshire	229	5,092	4.4	4.7	7.4	0.8
Colorado	108	9,833	2.6	4.8	8.4	1.4	New Jersey	307	30,049	3.8	4.8	6.0	1.0
Connecticut	195	14,265	4.4	6.0	8.3	1.2	New Mexico	72	4,002	3.0	5.4	5.5	0.8
Delaware	30	1,412	2.1	3.4	4.7	0.6	New York	740	73,727	4.4	5.2	7.3	1.9
District of Columbia	1	2,813	5.2	3.7	2.8	2.4	North Carolina	75	14,269	2.0	3.5	5.6	0.9
Florida	98	24,329	1.7	—	5.4	2.2	North Dakota	79	2,012	3.7	4.1	7.2	0.8
Georgia	55	13,498	1.9	2.8	4.6	0.8	Ohio	250	43,239	3.9	5.1	12.4	1.5
Hawaii	1	3,553	3.0	2.9	6.2	0.7	Oklahoma	114	5,644	2.2	4.3	6.3	0.7
Idaho	106	3,219	3.2	5.1	7.7	0.9	Oregon	124	7,213	2.4	—	10.0	0.8
Illinois	617	38,886	3.7	5.2	7.7	1.4	Pennsylvania	460	25,318	2.2	3.2	4.7	0.7
Indiana	238	21,531	4.2	5.6	10.5	1.6	Rhode Island	50	4,276	4.3	5.6	6.8	0.9
Iowa	529	11,393	4.0	5.0	8.8	—	South Carolina	40	6,817	1.9	2.9	4.4	1.1
Kansas	324	9,589	4.6	5.4	9.7	1.3	South Dakota	112	2,513	4.7	5.1	8.9	—
Kentucky	116	7,506	2.1	3.0	5.4	0.5	Tennessee	141	7,999	1.5	2.6	3.9	0.8
Louisiana	65	10,145	2.3	2.6	4.3	0.7	Texas	500	34,118	2.0	2.8	4.3	0.9
Maine	268	5,359	5.2	—	7.7	—	Utah	70	5,065	2.7	4.5	9.3	1.2
Maryland	24	14,964	3.0	3.5	9.0	1.3	Vermont	197	2,692	5.1	—	7.0	—
Massachusetts	370	29,053	4.8	—	7.3	—	Virginia	90	16,672	2.6	4.5	7.4	1.1
Michigan	383	25,876	2.8	3.8	5.4	0.9	Washington	69	15,656	2.9	—	10.0	—
Minnesota	130	13,302	2.9	4.9	9.6	1.3	West Virginia	97	4,862	2.7	3.6	4.6	0.9
Mississippi	47	5,180	1.9	2.4	3.2	0.4	Wisconsin	381	17,008	3.3	5.4	9.0	1.2
							Wyoming	23	2,294	4.8	5.2	7.6	1.2

¹ Some data are different from other tables due to a different population base. —Response rate less than 70 percent.
² The total number of persons entering the library for whatever purpose during the year. NOTE.—Totals may be underestimated due to nonresponse.
³ A reference transaction is an information contact which involves the knowledge, use, recommendations, interpretation or instructions in the use of one or more information sources by a member of the library staff. SOURCE: U.S. Department of Education, National Center for Education Statistics, *Public Libraries in the United States: FY 1996*. (This table was prepared July 1999).

Table 430.—Percent of workers, 18 years old and over, using computers on the job, by selected characteristics and computer activities: October 1993 and October 1997

Selected characteristics	Percent using computers at work, 1993	1997											
		Percent using computers at work	Number using computers at work, in thousands	Percent of on-the-job computer workers using specific computer applications ¹									
				Analysis/spread-sheets	Book-keeping, invoicing, and inventory	Com-muni-ca-tions ²	Cal-endar/sched-ule	Data bases	Desk-top publish-ing/graph-ics	Program-ming	Sales and tele-marketing	Word process-ing	Using 4 or more cat-egories
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Total	45.8	49.8 (0.2)	63,885	40.9	66.4	47.0	37.5	34.1	26.1	15.0	22.1	57.0	44.0
Age													
18 to 24	34.4	37.1 (0.7)	6,007	28.2	70.3	35.3	28.0	23.4	18.4	11.0	23.5	43.1	30.5
25 to 29	48.3	52.5 (0.7)	7,984	41.7	69.8	46.6	38.3	35.0	25.8	16.3	23.4	58.3	45.7
30 to 39	50.7	53.3 (0.5)	18,864	44.0	67.0	49.1	39.6	35.4	28.3	16.7	24.0	58.5	46.8
40 to 49	51.3	54.9 (0.5)	18,182	43.6	65.8	48.6	39.5	36.9	27.1	15.7	20.6	58.9	46.4
50 to 59	43.9	50.7 (0.6)	10,092	39.1	62.8	49.0	37.2	33.5	26.1	13.5	19.6	58.8	43.1
60 or older	27.2	32.6 (0.9)	2,755	33.5	62.1	42.2	29.4	28.8	21.6	10.0	21.3	54.1	35.9
Educational attainment and sex													
Not high school graduate	10.0	11.9 (0.5)	1,645	18.6	68.9	23.4	22.1	17.3	10.7	8.7	19.7	30.7	20.2
High school graduate	34.2	36.4 (0.4)	15,395	28.7	72.0	34.1	29.0	23.1	16.6	10.1	21.0	41.5	30.7
Some college	50.4	53.6 (0.5)	14,172	36.5	71.6	42.6	36.0	31.3	24.1	13.7	24.0	52.7	40.6
Associate degree	58.2	60.7 (0.8)	6,580	38.9	69.8	43.7	36.0	33.0	25.5	15.1	19.7	52.7	41.2
Bachelor's degree	68.8	73.9 (0.5)	17,335	52.7	63.9	57.1	44.0	43.1	32.4	18.9	25.8	67.6	55.3
Master's degree	71.2	78.7 (0.8)	6,004	53.8	51.7	63.4	48.1	45.8	39.7	20.8	18.4	80.1	59.8
Doctor's or professional de-gree	66.9	74.6 (1.2)	2,754	46.6	47.5	64.9	42.0	39.0	30.3	16.2	10.5	75.2	50.2
Male													
Not high school graduate ..	8.5	9.8 (0.5)	854	20.9	70.1	25.6	22.6	15.6	11.8	9.3	17.8	26.1	20.6
High school graduate	24.2	27.1 (0.5)	6,096	29.5	67.4	33.1	25.3	22.9	17.8	11.8	20.5	29.4	27.7
Some college	42.8	46.0 (0.7)	6,188	39.3	69.4	44.4	35.5	31.3	27.0	19.6	27.1	46.4	41.4
Associate degree	52.6	55.2 (1.2)	2,790	42.8	64.2	45.5	34.9	34.9	28.7	20.4	20.6	45.3	41.8
Bachelor's degree	69.8	74.3 (0.7)	9,258	60.0	64.0	62.1	47.4	46.9	35.7	24.1	30.5	66.6	60.0
Master's degree	75.4	79.8 (1.1)	3,201	63.3	56.6	70.6	54.6	50.8	41.9	27.8	23.8	80.5	67.4
Doctor's or professional de-gree	66.5	73.4 (1.4)	1,949	47.9	50.3	67.3	43.7	38.6	31.9	18.2	11.6	74.6	52.0
Female													
Not high school graduate ..	12.5	15.4 (0.8)	791	16.0	67.7	20.9	21.6	19.1	9.4	8.0	21.7	35.6	19.8
High school graduate	45.2	46.9 (0.6)	9,299	28.3	75.0	34.7	31.5	23.3	15.9	8.9	21.4	49.4	32.6
Some college	58.6	61.5 (0.7)	7,984	34.4	73.2	41.1	36.4	31.3	21.8	9.1	21.7	57.5	40.1
Associate degree	63.7	65.4 (1.0)	3,790	36.0	73.9	42.4	36.8	31.7	23.2	11.2	19.0	58.1	40.7
Bachelor's degree	67.6	73.5 (0.7)	8,077	44.4	63.8	51.4	40.1	38.8	28.7	12.9	20.4	68.8	50.0
Master's degree	66.5	77.5 (1.1)	2,804	43.0	46.0	55.2	40.7	40.1	37.3	12.8	12.2	79.7	51.0
Doctor's or professional de-gree	68.2	77.6 (2.1)	805	43.7	41.0	59.1	37.8	39.9	26.4	11.4	7.9	76.8	45.9
Race/ethnicity													
White, non-Hispanic	48.7	53.8 (0.3)	51,904	42.1	67.1	47.7	38.0	34.9	27.1	15.2	23.2	57.9	45.3
Black, non-Hispanic	36.2	40.0 (0.7)	5,462	33.1	64.3	43.7	36.1	29.6	21.2	14.1	17.1	52.0	37.2
Hispanic	29.3	30.2 (0.8)	3,843	32.2	67.0	40.5	33.7	27.0	20.2	10.6	19.0	50.0	35.1
Other	43.9	49.2 (1.3)	2,675	45.8	57.4	49.5	35.8	37.8	25.0	19.3	16.2	59.4	44.7
Occupational group													
Managerial and professional specialty	67.7	74.6 (0.4)	28,427	52.4	61.0	58.6	45.2	42.6	36.3	19.1	20.6	71.7	56.0
Executive, administrative, and managerial	72.3	77.5 (0.5)	14,528	60.1	76.3	61.4	49.7	47.2	32.6	17.6	30.9	74.5	63.7
Professional specialty oc-cupations	68.3	71.7 (0.6)	13,900	44.4	45.1	55.8	40.4	37.8	40.3	20.8	9.8	68.7	47.8
Teachers, except college and university	49.1	60.3 (1.2)	2,961	33.1	31.9	39.7	38.4	27.5	42.3	10.8	4.6	73.6	39.8
Teachers, college and university	72.5	79.9 (2.2)	759	51.5	27.1	74.6	37.3	40.2	41.3	23.9	5.4	83.5	48.9
Technical, sales, and admin-istrative support	65.5	79.1 (0.4)	25,739	35.1	74.6	41.8	33.9	30.4	19.4	11.9	28.1	52.1	39.5
Technicians and related support	69.9	75.1 (1.1)	3,226	42.9	51.8	49.4	35.5	36.9	26.1	31.2	7.7	49.6	41.4
Sales occupations	48.8	54.8 (0.7)	8,277	38.4	83.0	43.0	34.3	31.3	21.0	10.5	57.2	46.1	44.8
Administrative support, in-cluding clerical	76.7	77.6 (0.5)	14,235	31.4	75.0	39.4	33.3	28.3	17.0	8.3	15.9	56.2	36.0
Service occupations	14.7	16.4 (0.5)	2,752	15.7	52.3	27.6	27.9	17.4	9.6	6.6	11.0	34.4	17.9
Precision production, craft, and repair	23.2	25.0 (0.6)	3,501	29.6	62.8	31.6	27.0	22.5	18.2	16.3	11.1	29.0	26.2
Operators, fabricators, and la-borers	14.9	17.3 (0.5)	3,154	19.1	63.1	21.3	19.0	14.6	12.6	9.7	9.2	17.4	15.4
Farming, forestry, and fishing	8.5	9.3 (0.9)	311	40.2	79.3	22.8	27.3	33.0	11.2	10.2	19.1	33.7	33.0
Family income³													
Less than \$20,000	25.1	26.7 (0.5)	5,915	27.6	67.8	34.0	28.7	24.0	19.4	11.7	22.2	44.9	31.4
\$20,000 to \$29,999	38.4	38.4 (0.6)	7,310	30.3	69.4	36.9	30.2	26.1	21.8	10.5	20.0	48.0	34.3
\$30,000 to \$39,999	45.7	45.8 (0.6)	8,915	35.7	67.4	42.2	33.7	29.4	23.8	12.8	20.8	50.8	38.0
\$40,000 to \$49,999	51.9	52.3 (0.7)	7,737	40.0	69.0	43.6	36.9	31.8	25.4	15.0	21.0	53.8	42.5
\$50,000 to \$74,999	60.6	59.9 (0.5)	16,966	42.7	65.8	48.6	38.9	36.1	27.2	16.5	20.6	58.4	45.5
\$75,000 or more	65.9	69.7 (0.5)	17,042	51.4	63.6	58.4	44.6	42.3	30.6	17.8	25.7	68.4	54.7

¹ Individuals may be counted in more than one computer activity.² Includes bulletin boards and electronic mail.³ Excludes persons whose income data were not available.

NOTE.—Data are based on a sample survey of households and are subject to sam-pling and nonsampling error. Standard errors appear in parentheses.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data. (This table was prepared August 1998.)

Table 432.—Percent of home computer users using specific applications, by selected characteristics: October 1997

Selected characteristics	Number of home computer users, in thousands	Percent of computer users using specific applications ¹										
		Home book-keeping ²	School assignments	Games	Job-related ²	Home connection to school or work	Word processing	Data bases ²	Graphics	Desktop publishing ²	Spreadsheets ²	Internet
1	2	3	4	5	6	7	8	9	10	11	12	13
Total, all persons ...	81,013 (600)	—	29.9	62.6	—	10.6 (0.2)	60.9	—	23.4	—	—	44.9 (0.3)
Total, all persons over 15	53,845 (461)	45.2 (0.4)	16.0	53.2	35.5	14.6 (0.3)	70.6	26.7	26.0	17.9	29.4	52.4 (0.4)
Sex												
Male	41,260 (413)	32.4 (0.4)	28.5	66.4	26.8	12.9 (0.3)	57.0	21.0	24.0	12.4	23.1	48.4 (0.4)
Female	39,753 (304)	28.8 (0.4)	31.3	58.5	21.8	8.3 (0.2)	64.9	16.4	22.8	13.2	17.8	41.3 (0.4)
Race/ethnicity												
White, non-Hispanic	68,026 (330)	31.5 (0.3)	28.9	62.9	24.8	10.9 (0.2)	61.7	19.3	24.0	13.2	21.1	46.1 (0.3)
Black, non-Hispanic	4,943 (108)	28.1 (1.1)	32.9	62.5	22.5	8.8 (0.7)	55.6	15.2	20.5	11.0	17.9	34.3 (1.2)
Hispanic	4,081 (93)	24.3 (1.3)	34.6	59.6	19.9	7.5 (0.8)	55.8	14.3	20.1	10.4	14.6	38.1 (1.5)
Other	3,963 —	24.3 (1.3)	38.3	59.1	22.4	11.7 (1.0)	59.1	17.7	21.3	10.0	19.4	44.2 (1.6)
Age												
Under 15	18,774 (222)	—	49.0	87.0	—	1.2 (0.1)	31.5	—	17.2	—	—	22.8 (0.5)
15 to 19	8,395 (153)	5.6 (0.4)	75.9	67.7	7.1	6.1 (0.5)	64.2	9.3	20.9	8.9	9.4	46.1 (0.9)
20 to 24	4,975 (119)	24.0 (1.0)	51.3	60.9	16.4	16.3 (0.9)	70.9	19.0	22.6	12.1	21.6	55.9 (1.2)
25 to 29	5,963 (130)	44.3 (1.1)	23.4	58.5	34.8	17.9 (0.9)	71.5	26.3	25.1	19.8	30.5	59.0 (1.1)
30 to 39	15,393 (203)	48.3 (0.7)	13.3	58.3	39.2	15.8 (0.5)	68.7	27.0	27.7	19.3	31.1	53.2 (0.7)
40 to 49	15,346 (203)	46.5 (0.7)	12.2	50.4	39.2	14.9 (0.5)	71.4	28.0	27.3	18.9	30.8	52.8 (0.7)
50 to 59	7,679 (147)	48.2 (1.0)	8.3	43.7	41.2	13.5 (0.7)	73.4	30.3	25.8	18.0	30.7	50.0 (1.0)
60 to 69	3,162 (96)	51.3 (1.5)	3.5	47.9	25.1	5.8 (0.7)	69.9	25.1	22.4	15.1	25.7	42.3 (1.5)
70 or older	1,327 (62)	44.5 (2.4)	2.1	43.0	17.3	4.4 (1.0)	63.8	22.4	17.1	9.2	20.2	35.3 (2.3)
Family income												
Under \$20,000	7,374 (144)	25.8 (0.9)	34.2	61.8	16.2	9.3 (0.6)	58.0	15.3	21.8	9.9	17.4	38.9 (1.0)
\$20,000 to \$29,999	7,819 (148)	29.3 (0.9)	30.8	66.4	18.7	6.7 (0.5)	57.2	15.6	22.4	12.4	16.6	37.6 (0.9)
\$30,000 to \$39,999	10,370 (169)	30.2 (0.8)	29.4	64.5	20.4	7.6 (0.5)	55.3	17.5	23.2	12.0	17.4	38.7 (0.8)
\$40,000 to \$49,999	9,627 (164)	29.3 (0.8)	28.3	66.3	20.4	8.1 (0.5)	55.5	16.6	23.9	12.1	18.0	38.6 (0.9)
\$50,000 to \$74,999	21,685 (236)	30.4 (0.5)	29.9	63.6	24.6	10.4 (0.4)	61.7	18.6	24.0	13.2	20.7	45.6 (0.6)
\$75,000 or more	24,138 (247)	33.4 (0.5)	29.1	58.2	31.7	14.9 (0.4)	66.8	22.2	23.7	14.1	25.0	53.6 (0.6)

¹ Individuals may be counted in more than one computer activity.² Data are for persons 15 years old and over.

—Data not available or not applicable.

NOTE.—Data are based on a sample survey of households and are subject to sampling and nonsampling error. Standard errors appear in parentheses.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data. (This table was prepared October 1998.)

Table 433.—Percent of student home computer users using specific applications, by selected characteristics: October 1997

Selected characteristics	Number of home computer users, in thousands	Percent of computer users using specific applications ¹										
		Home book-keeping ²	School assignments	Games	Job-related ²	Home connection to school or work	Word processing	Data bases ²	Graphics	Desktop publishing ²	Spreadsheets ²	Internet
1	2	3	4	5	6	7	8	9	10	11	12	13
Total, all students	32,459 (310)	—	65.9 (0.4)	78.0	—	7.4 (0.2)	52.5	—	21.4	—	—	36.3 (0.4)
Preprimary	2,493 (83)	—	5.2 (0.7)	89.5	—	0.4 (0.2)	4.6	0.0	10.8	—	—	4.4 (0.7)
1st to 8th grade	14,056 (205)	—	58.3 (0.7)	93.0	—	1.3 (0.2)	36.1	0.0	19.2	—	—	25.1 (0.6)
White, non-Hispanic	11,340 (182)	—	55.6 (0.8)	89.1	—	1.2 (0.2)	35.7	0.0	19.5	—	—	26.4 (0.7)
Black, non-Hispanic	1,078 (50)	—	49.8 (2.3)	84.1	—	1.0 (0.5)	23.6	0.0	9.5	—	—	16.0 (1.7)
Hispanic	863 (37)	—	51.0 (2.1)	77.5	—	2.0 (0.6)	28.2	0.0	14.3	—	—	19.4 (1.7)
9th to 12th grade	7,699 (139)	2.9	84.8 (0.6)	76.0	5.2	3.1 (0.3)	65.9	6.1	22.3	7.0	6.5	42.2 (0.9)
White, non-Hispanic	6,265 (125)	2.8	80.4 (0.8)	72.5	4.2	3.1 (0.3)	64.3	6.0	22.2	7.1	6.3	43.6 (1.0)
Black, non-Hispanic	534 (38)	1.7	74.3 (3.1)	69.7	9.9	1.4 (0.8)	47.2	2.4	15.3	4.0	2.2	27.6 (3.2)
Hispanic	458 (37)	3.1	73.0 (3.6)	64.2	4.4	2.2 (1.2)	55.2	4.1	13.4	3.9	4.5	37.3 (3.9)
Undergraduate	6,179 (124)	22.5	82.0 (0.8)	54.3	17.8	20.3 (0.8)	79.7	0.0	25.4	14.3	24.6	57.9 (1.0)
Graduate	2,032 (70)	38.1	73.4 (1.5)	44.3	43.4	32.0 (1.6)	88.0	0.0	32.9	25.5	36.6	65.9 (1.6)
Males												
Preprimary	1,308 (60)	7.2	62.5 (0.6)	79.9	7.2	7.7 (0.3)	47.0	0.0	20.3	5.4	8.9	37.3 (0.6)
1st to 8th grade	7,257 (144)	—	5.5 (1.0)	90.3	—	0.8 (0.4)	3.8	0.0	11.2	—	—	5.9 (1.1)
9th to 12th grade	3,971 (98)	—	54.8 (1.0)	89.8	—	1.4 (0.2)	31.3	0.0	16.3	—	—	25.0 (0.8)
Undergraduate	2,841 (83)	3.0	78.6 (1.0)	78.8	5.5	3.4 (0.4)	58.9	0.0	21.9	6.6	6.7	44.5 (1.2)
Graduate	834 (45)	23.5	82.7 (1.1)	59.8	18.8	23.7 (1.2)	78.8	0.0	28.6	13.8	28.4	63.6 (1.4)
Females												
Preprimary	1,185 (57)	7.5	64.3 (0.6)	70.2	7.4	6.6 (0.3)	54.1	0.0	20.8	6.4	8.0	35.4 (0.6)
1st to 8th grade	6,799 (139)	—	4.9 (1.0)	88.6	—	0.0 (0.0)	5.3	0.0	10.4	—	—	2.7 (0.8)
9th to 12th grade	3,728 (95)	—	55.4 (1.0)	85.9	—	1.1 (0.2)	37.0	0.0	20.0	—	—	25.1 (0.9)
Undergraduate	3,337 (90)	2.5	81.3 (1.0)	64.0	4.1	2.5 (0.4)	65.5	0.0	20.0	6.5	5.5	39.7 (1.2)
Graduate	1,197 (54)	21.6	81.5 (1.0)	49.5	17.0	17.4 (1.0)	80.6	0.0	22.7	14.7	21.3	53.1 (1.3)

¹ Individuals may be counted in more than one computer activity.² Data are for persons 15 years old and over.

—Data not available or not applicable.

NOTE.—Data are based on a sample survey of households and are subject to sampling and nonsampling error. Standard errors appear in parentheses.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data. (This table was prepared October 1998.)

